2.2 Add Real Numbers

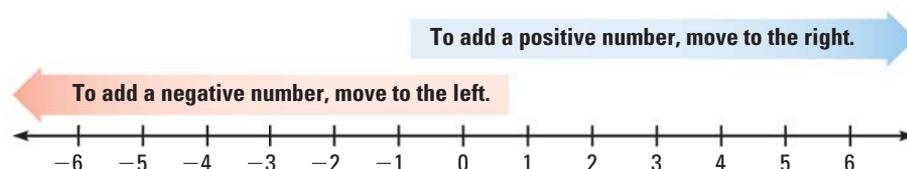|	
Before	You added positive numbers.
Now	You will add positive and negative numbers.
Why?	So you can calculate a sports score, as in Ex. 57.

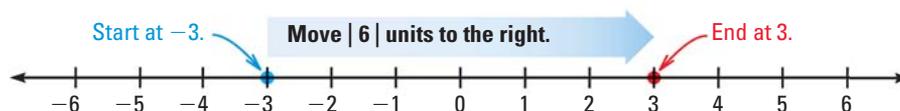**Key Vocabulary**
• additive identity
• additive inverse

One way to add two real numbers is to use a number line. Start at the first number. Use the sign of the second number to decide whether to move left or right. Then use the absolute value of the second number to decide how many units to move. The number where you stop is the sum of the two numbers.
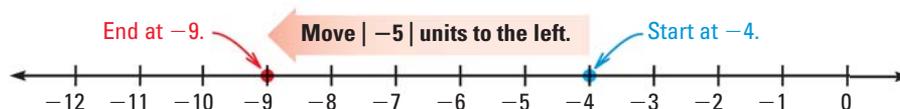
To add a positive number, move to the right.

To add a negative number, move to the left.

EXAMPLE 1   Add two integers using a number line

Use a number line to find the sum.

a. $-3 + 6$

Start at -3.   Move $|6|$ units to the right.   End at 3.

▶ The final position is 3. So, $-3 + 6 = 3$.

b. $-4 + (-5)$

End at -9.   Move $|-5|$ units to the left.   Start at -4.

▶ The final position is -9. So, $-4 + (-5) = -9$.

✓ **GUIDED PRACTICE**   for Example 1

Use a number line to find the sum.

1. $7 + (-2)$ **2.** $8 + (-11)$ **3.** $-8 + 4$ **4.** $-1 + (-4)$